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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,119	06/11/2007	Lin Zhi	3800024.00324 / 1112US	1033
77202	7590	11/03/2010		
K&L Gates LLP 3580 Carmel Mountain Road Suite 200 San Diego, CA 92130			EXAMINER CHANDRAKUMAR, NIZAL S	
			ART UNIT	PAPER NUMBER
			1625	
			MAIL DATE	DELIVERY MODE
			11/03/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,119

Applicant(s)

ZHI ET AL.

Examiner

NIZAL S. CHANDRAKUMAR

Art Unit

1625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25, 27-35, 62-70, 72-78 and 82 is/are pending in the application.
- 4a) Of the above claim(s) 69, 70 and 72-77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-35, 62-68, 78 and 82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/13/2010, 1/29/2010, 11/30/2006.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 9/13/2010 is acknowledged. The traversal is on the ground(s) that

- 1. Technical Feature is Novel over the Cited Art**
- 2. No Burden**
- 3. Requirement as Set Forth is Not Comprehensive**

a. Claim 70

b. Groups 28 - 39

- 4. Product and Process of Use Claims - 37 CFR § 1.475**
- 5. Correction of the Requirement Respectfully is Requested**

This is not found persuasive because of reasons of record. Specifically,

1. the cited art relates to the common technical feature in all the groups. The cited art properly identifies the 'invariant structural' moiety in the all the groups as diethylaniline i.e., being not special and thus not a contribution over prior art.
2. There is search burden: a preliminary search by the applicant suggested STN Express data base search returned over 400 references. (A search for the instantly claimed formula compounds in the applicant suggested STN Express data base returned over 250 references, some of which are shown in this office action).

3. 5. In telephonic conversation with Frank Miskiel, Reg.No. 53332, (Tel..858 509 7411), Examiner discussed if a new Restriction Requirement should be filed. Attorney did not prefer a new Restriction Requirement. Further, attorney admitted that the original claim 70 had improper dependence.

4. The restriction for product and process of use claims is proper for reasons of record. Further, the availability of rejoinder provision was explicitly stated on pages 7-8 of the Restriction Requirement.

The requirement is still deemed proper and is therefore made FINAL.

Claims 69, 70, 72-77 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/13/2010.

Applicant is reminded (see below for request regarding change of inventorship) that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Change of Inventorship: A New BIB data sheet with corrected inventor information is attached to this office action.

Note: The claims contain non-elected subject matter. See for example, claim 2, numbered page 8

provided that if R^1 is NO_2 and R^3 is F, then Z is not O;

Claims 1-25, 27-35, 62-68, 78, 82 are examined to the extent that they read on the elected subject matter:

CRARB. compounds of formula II wherein n is 0, Z is

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

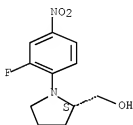
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 4, 12, 13, 14, 15, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Selvakumar et al. Synthesis (2002), (16), 2421-2425.

Selvakumar et al. teach

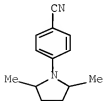
RN 509151-85-3 CAPLUS



R1 NO2
R2 H
R3 H F
R4 H F
R5 H
R6 H
R7 H
R9 CH(RD)O(RD) RD being H
R 10 H
R12 H
R13 H
RA H
RB H

Claim 5, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Rettig et al. Journal of Physical Chemistry (1985), 89(22), 4676-80.

Rettig et al. teach
RN 80887-45-2 CAPLUS

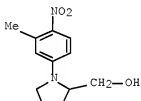


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R1 CN
 R2 H
 R3 H
 R4 H
 R5 H
 R6 H
 R7 C1 ALKYL
 R9 C1 ALKYL
 R 10 H
 R12 H
 R13 H
 RA H
 RB H

Claim 6, 7, 8, 9, 10, 11, 22, 23, 24, 29, are rejected under 35 U.S.C. 102(b) as being anticipated by Oki et al. US 5278034.

Oki et al. teach
 RN 143525-57-9 CAPLUS



R1 NO2
 R2 C1 alkyl
 R3 H
 R4 H
 R5 H
 R6 H
 R7 H
 R9 CH(RD)O(RD) RD being H (hydroxymethyl)
 R 10 H
 R12 H
 R13 H

Art Unit: 1625

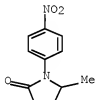
RA H

RB H

Claim 18, 19, 20, 21, 25, 27, 28, 30, 35, are rejected under 35 U.S.C. 102(b) as being anticipated by Abdallah et al. *Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry* (1972-1999) (1983), (8), 1243-9. STN abstract provided, Full article is on order from information service.

Abdallah et al. teach

RN 13691-23-1 CAPLUS



R1 NO2

R2 H

R3 H

R4 H

R5 H

R6a carbonyl

R7a carbonyl

R9 C1 alkyl H

R 10 H

R12 H

R13 H

RA H

RB H

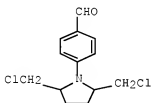
Claims 30, 31, 32, 34, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by

Sokolov et al. *Zhurnal Obshchei Khimii* (1966), 2(6), 1088-92.

Sokolov et al. teach

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RN 10135-06-5 CAPLUS



R1 CORA RA being H

R2 H

R3 H

R4 H

R5 H

R6a carbonyl

R7a carbonyl

R9 C1 alkyl H

R 10 H

R12 H

R13 H

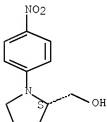
RA H

RB H

Claim 62 is rejected under 35 U.S.C. 102(b) as being anticipated by Zyss et al. Journal of Chemical Physics (1984), 81(9), 4160-7.

Zyss et al. teach

RN 88422-19-9 CAPLUS



Line 7 of numbered page 14 of claim 62.

Note:

1. The preamble of the claim(s), if present, is not given patentable weight because the property is inherent to the compound. A compound and its properties are inseparable. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 195).

2. All the above cited references are available as prior art references under 35 U.S.C. 103(a) 103(a).

3. The variable Z of the elected group in all the above rejections is CH₂, i.e., RA = RB = H. As such no distinction is made between the formulae of claim 1, claims 30, 34 and 35. Also note that no 35 U.S.C. 103(a) 112-1 (scope of enablement with regards to Z of the claimed formula being other than CH₂) is presented at this time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

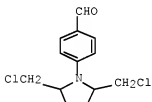
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sokolov et al. Zhurnal Obshchei Khimii (1966), 2(6), 1088-92

Sokolov et al. teach



which corresponds to the formula of claim of the base claim 30 and is positional isomer of claim 33.

Positional isomers, having the same radical on different positions of the molecule, are *prima facie* obvious, and require no secondary teaching. The experienced Ph.D. synthetic organic chemist, who would make Applicants' compounds, would be motivated to prepare these position isomers based on the expectation that

such close analogues would have similar properties and upon the routine nature of such position isomer experimentation in the art.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 62 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The name of the compound defines the compound. The need for the terms "(compound #)" appear to imply more than what is positively recited.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAL S. CHANDRAKUMAR whose telephone number is (571)272-6202. The examiner can normally be reached on 8.30 AM - 4.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571 0272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nizal S Chandrakumar/
Acting Examiner of Art Unit 1625